# A NEW SPECIES OF *EXACUM* L., GENTIANACEAE, FROM AGASTHIYAMALAI (POTHIGAI), SOUTHERN WESTERN GHATS, INDIA<sup>1</sup>

## R. GOPALAN<sup>2</sup>

(With one text-figure)

Key words: Exacum klackenbergii sp. nov., Agasthiyamalai, South Western Ghats

A new species of *Exacum*, from Agasthiyamalai (Pothigai), southern Western Ghats, India, is described and illustrated.

### Exacum klackenbergi sp. nov.

A Exacum wightianum Arn. caulibus lignosis, teretibus (non alatis); foliis distincte petiolatis, ellipticis, apice enciforme acuminatis; antheris oblongis, ad basim sagittatis differt.

Holotypus (*R. Gopalan* 88726, CAL) and isotypi (*R. Gopalan* 88726, MH — num. acc. 163946-48) in Sangumuthirai, Pothigaimalai (Agasthiyamalai) in ditione Tirunelveli in statu Tamil Nadensi, India, ad altitudinum *c.* 1,500 m, die 5.ii.1989 lecti.

Allied to *E. wightianum* Arn. but differs in the stem being woody, terete (not winged), leaves distinctly petioled, elliptic, ensiformly acuminate at apex and anthers oblong, sagittate at base.

Herb, to 70 cm high, divaricately or erectopatently branched; internodes varying in length, shorter than leaves; stems woody, terete at base, minutely striate towards apex; branchlets 4-angled. Leaves opposite, simple; petioles to 1.2 cm long, rounded abaxially, canaliculate abaxially (not amplexicaul); lamina elliptic, 2-6.5 x 0.9-2.1 cm, attenuate at base, entire and revolute along margins, acuminate or ensiformly acuminate (acumen to 15 mm long) at apex, coriaceous, 3-nerved at base; midrib prominent beneath, minutely grooved above; lateral nerves 2, prominent beneath, slightly raised above. Floral leaves 2; petioles to 4 mm long; lamina

elliptic, 4-25 x 1-11 mm, attenuate at base, entire and revolute along margins, acuminate (acumen to 5 mm long) at apex. Inflorescence a terminal cyme (rarely solitary, axillary); peduncles and pedicels 4-angled, drooping, minutely winged; bracts 2, ovate, 3-5 x 0.7-2 mm, cuneate to attenuate at base, entire, acuminate at apex. Flowers zygomorphic, bisexual. Calyx 5-lobed; lobes coalescent to 3 mm from base, ovatelanceolate, 13-15 x 4-5.5 mm, subequal, gradually narrowing towards apex, winged; wings (semi) cordate at base, distinctly nerved. Corolla blue, yellow at throat; tube 6-8 mm long; lobes 5, quincuncialis, broadly elliptic, 18-31 x 8-19 mm, membranous, wavy along margins, acute at apex. Stamens 5, adnate to corolla tube; filaments 2-3 mm long, flat; anthers oblong (not bottle-shaped), 8-9 x 1.5-2 mm, sagittate at base, opening by longitudinal slit above, with a prominent papilla near the apex on dorsal side, basifixed. Ovary oblongovoid, c. 7 x 4 mm; style stout, terete, 12-13 (-14) mm long, curved; stigma slightly capitate, viscid.

Holotype (*R. Gopalan* 88726, CAL) and isotypes (*R. Gopalan* 88726, MH – Acc. No. 163946-48) were collected from Sangumuthirai, Pothigaimalai (Agasthyamalai) in Tirunelveli district, Tamil Nadu, 1,500 m, 5.ii.1989.

**Etymology**: The species is named in honour of Dr. Jens Klackenberg, Botanical Institute, University of Stockholm, Sweden, for his valuable monograph on the paleotropical genus *Exacum* L. (Gentianaceae).

<sup>&</sup>lt;sup>1</sup>Accepted April, 2000

<sup>&</sup>lt;sup>2</sup>Botanical Survey of India,

Coimbatore 641 003, Tamil Nadu, India.

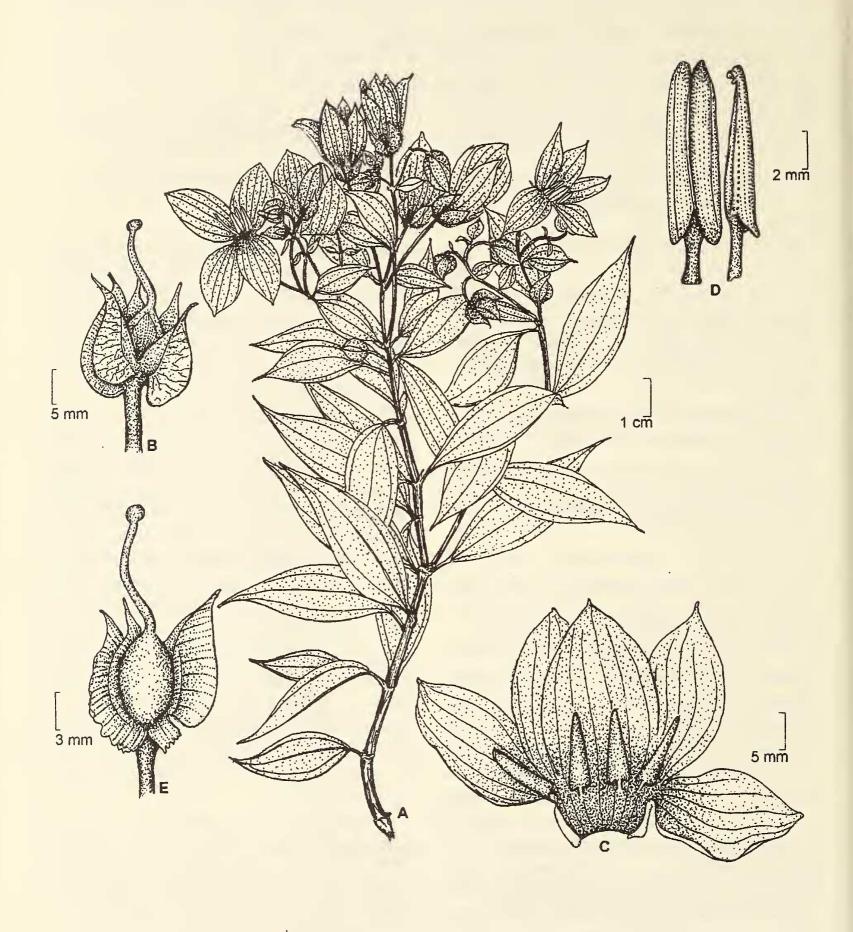


Fig. 1: Exacum klackenbergi sp. nov., A. Branchlet, B. Calyx, C. Corolla spreadout with stamens, D. Stamen (Front & Lateral views), E. Pistil

#### NEW DESCRIPTIONS

#### **ACKNOWLEDGEMENTS**

I thank Dr. P. Daniel, Deputy Director, Botanical Survey of India (BSI), Coimbatore, for facilities, encouragement and critically going through the manuscript, and Dr. V.J. Nair, Scientist Emeritus, BSI, Coimbatore for the Latin diagnosis. I thank Dr. A.N. Henry, Scientist Emeritus, BSI, Coimbatore, for valuable suggestions.